

Request For Proposal 2012 Digital Orthophotography

1. RFP Purpose

The South Mississippi Aerial Photography (SMAPI) is seeking proposals from qualified firms to acquire color, six-inch for 1":100' scale and 1 foot for 1":200' scale, digital orthophotography for the six southern counties of Mississippi during leaf off period of 2011/2012. SMAPI is a consortium of six local County Governments with common needs for professional services in updating GIS products used in the assessment of taxable properties. The contract for the 2012 imagery will be an agreement between the selected provider and the County Governments participating. The Counties will retain ownership of their respective imagery and associated products in accordance with State law and Freedom of Information Statues. Other State and Federal agencies may participate in ownership via Memorandum or other instrument. This Request for Proposal (RFP) provides an overview of the project task areas, current imagery specifications, and the information required to respond to this RFP. This RFP in no way commits SMAPI to contracting for services. Funding commitments from local participants may not be confirmed until SMAPI can provide actual price proposals to its partners. While cost is extremely important, the consultant's qualifications, past experience and proposed solutions for producing the required products will also be considered

2. Project Overview

Title 35, Part IV, Subpart 02, Chapter 06 of the Mississippi Administrative Code, requires counties to acquire updated photography on regular intervals. These intervals are based on parcel density and overall size of the county. However, at any time the Tax Assessor determines the need and based on the approval of the Board of Supervisors updated aerials maybe tasked. In 2005 the Coast of Mississippi experienced Hurricane Katrina which significantly changed the lives of South Mississippi. In 2007 the State provided updated aerial photography to the entire state including South Mississippi. Most Orthophotography was completed at 2 foot resolution with many areas upgrading to 1 foot in 1:400 scale and six inch at 1:100 scale. Based on the 2007 photography and subsequent assessments, population shifts continue throughout the study area as well as major changes to infra-structure dictating a new Aerial Photography study.

2.1 Project Area

The project area for the 2012 flight is currently estimated between 3,628 and 4,600 square miles and includes all or portions of the following counties: George, Stone, Pearl River, Jackson, Harrison and Hancock Counties Mississippi. A map of the current estimated project area is contained within Attachment A of this RFP. We are reasonably certain the extent of the acquisition area for this project will not change; however, it is possible that some jurisdictions

currently planning to participate may opt out due to budget constraints. Prospective contractors are requested to provide cost proposals on a per-square -mile basis to accommodate this uncertainty. The final extent of the project will be determined.

3. Proposal Instructions

3.1 Registration - In order to receive addenda, answers to information requests, and other important communications regarding this RFP, it is imperative you register your receipt of this RFP by sending the following information to Melissa Pope at mpope@co.harrison.ms.us from Harrison County:

- Name of Firm
- Address
- Contact Name
- Phone
- Fax
- Email

3.2 Submission Instructions - Submit one original (clearly marked original) and eight copies of the proposal in a sealed package to the following address:

**Harrison County Purchasing Department
ATTN: SMAPI
PO BOX CC
Gulfport, MS 39503**

Faxed proposals will not be considered.

The original proposal shall be signed by a person who is authorized to sign contracts for the respondent. The copies of the proposal should show copies of the signature. The original proposal (and only the original proposal) shall also include a digital copy of the proposal in Adobe PDF format on CD-ROM. Label the outside of the sealed package as follows:

3.3 Deadline - Proposals shall be received at the location stated above no later than the Proposal Due Date shown in the Project Schedule. Proposals received after the deadline will not be accepted. Also, if the agency is closed for any reason, including but not limited to: acts of God, strikes, lockouts, riots, acts of war, epidemics, governmental regulations superimposed after the fact, fire, earthquakes, floods, or other natural disasters (the "Force Majeure Events"), which closure prevents the opening of proposals at the advertised date and time, all proposals received shall be publicly opened and read aloud on the next business day that the agency shall be open and at the previously advertised time. The new date and time of the proposal opening, as determined in accordance with this paragraph, shall be deemed to have knowledge of and shall have agreed to the provisions of this paragraph. Proposals shall be received by the agency until

the new date and time of the proposal opening as set forth herein. **The agency shall not be held responsible for the receipt of any proposal for which the delivery was attempted and failed due to the closure of the agency as a result of a Force Majeure Event.** Each vendor/contractor shall be required to ensure the delivery and receipt of its proposal by the agency prior to the new date and time of the proposal opening.

3.4 Presentations and Site Visits - The top three qualified respondents following the evaluation of the proposals may be invited to make a presentation in person or via the web. If so, the Counties will notify the respondents of the date and time of the presentation. In addition, certain respondents may be asked to participate in one or more site visits by the Counties' representatives to investigate the respondent's ability to meet the project requirements. All costs incurred by the respondent in the presentations or site visits shall be the responsibility of the respondent. After any such presentation, visits, or demonstrations, proposals may be evaluated again.

3.5 Project Schedule - The Counties have established a tentative schedule for proposal submission, review, Contractor(s) selection, and project initiation, as follows:

Project Schedule

Milestone Date Time

- RFP Released November 10, 2011
- Pre-Proposal Tele-Conference November 17, 2011 1:30 PM CST
- Response to Information Requests Deadline November 20, 2011 4:00 PM CST
- Proposal Due Date November 28, 2011 4:00 PM CST
- Oral Presentations (if required) Week of November 28, 2011
- Contractor(s) Selection Approval December 9, 2011
- Notice to Proceed Approx December 12, 2011
- Initial Project Completion June 1, 2012

3.6 Proposal Acceptance and Rejection - The Counties reserve the right to accept any proposal, to reject any or all proposals, to waive irregularities or informalities in any proposal, and to make the award in any manner deemed in the best interest of the Counties.

3.7 Quality Control - The proposal will be evaluated on the basis of the apparent effectiveness of the respondent's proposed quality control program. The respondent will follow ASPRS (American Society of Photogrammetry and Remote Sensing) quality control standards and be ASPRS Certified.

3.8 Questions - If you have any questions about this RFP or the proposal procedures, submit them by email or fax by the Information Request Deadline indicated in the Project Schedule.

Requests received after this deadline will not be considered. All requests received before the deadline will be answered by the Counties in an email to all registered recipients of this RFP. The requestor shall be responsible for notifying the Counties of any problem in receiving replies. Email or fax questions about this RFP or the proposal procedures to either:

Bob Jackson bjackson@co.harrison.ms.us , 228-865-4078, Fax 228-865-4076 or
Melissa Pope mpope@co.harrison.ms.us , 228-865-4028, Fax 228-865-4223

4. Selection Criteria-The following criteria will be used to evaluate proposals. This is not intended to be a comprehensive list, nor is the arrangement of the criteria meant to imply order of importance in the selection process.

4.1 Compliance with RFP Instructions - The proposals will be evaluated for general compliance with instructions issued in the RFP. Noncompliance with significant instructions may be grounds for proposal disqualification.

4.2 Technical Expertise - The proposal will be evaluated on the respondent's demonstrated technical suitability for performing the project services.

4.3 Digital Camera System - The Counties require the respondent to use a digital camera system for this project. Proposals will be disqualified on the basis of this factor.

4.4 Technical Approach - The proposal will be evaluated on the methods and technical details that will be used to complete the project.

4.5 Quality Control - The proposal will be evaluated on the basis of the apparent effectiveness of the respondent's proposed quality control program. The Counties prefer the respondent follow ISO (International Standards Organization) quality control standards and be ISO certified.

4.6 Professional Registration - The proposals will be evaluated for professional registration. The proposal shall include an ASPRS Certified Photogrammetrist.

4.7 Business Registration - The respondent shall be licensed to do business in the State of Mississippi prior to award of the contract.

4.8 Firm Background - The proposal will be evaluated on the basis of the respondent's background, including the number of years in business, size, and financial stability.

4.9 Staff Qualifications - The proposal will be evaluated on the basis of the respondent's demonstrated staff qualifications, including the required professional registrations and certifications.

4.10 Similar Project Experience - The proposal will be evaluated on the basis of project experience that is of a similar technical nature and complexity, for clients that are similar in size, location, and type as the SMAPI area.

4.11 Schedule and Availability - The respondent's projected schedule and resource availability will be evaluated in the choice of a Contractor, although the Counties understand that the actual beginning and completion dates are subject to the notice to proceed.

4.12 Sample Digital Orthophoto - The sample digital orthophotos will be an important factor in evaluating the Contractor's ability to meet the requirements of the specification.

4.13 Other Services- Respondent should address other services available to counties as options or as needed and priced separately for individual county negotiations on a buy up or as need basis for individual county negotiation.

4.14 Fee - The respondent's fee will be considered in the choice of Contractor but will not be the sole determining factor.

5. Proposal Format

All proposals shall follow the same format. No exceptions to this format shall be accepted. To be accepted for evaluation, the proposal format shall address all required components in order.

The aim of the required format is to simplify the proposal preparation and evaluation processes and to ensure that all proposals receive the same orderly review. All proposals shall include the following components:

Section	Topic
	Cover Letter
1	Company Overview
2	Project Services
3	Project Team
4	Related Experience
5	Proposed Schedule
6	Fee
7	Sample Orthophoto
8	Additional information

6. Proposal Components

6.1 Cover Letter - Provide a one or two page cover letter. Include the original signed cover letter with the original proposal and a copy of the cover letter with each copy of the proposal.

The cover letter shall provide the following:

6.1.1 A brief statement of the respondent's understanding of the project

6.1.2 The name, title, phone number, fax number, email address, and street address of the person in the respondent's organization who shall respond to questions about the proposal

6.1.3 Highlights of the respondent's qualifications and ability to perform the project services

6.2 Section 1: Company Overview - Provide the following information about your firm:

6.2.1 The firm's name, business address, phone number, and fax number

6.2.2 The year the firm was established

6.2.3 Former names of the firm, if applicable

6.2.4 The type of ownership and parent company, if applicable

6.2.5 The location of the office or offices that would provide the project services

6.2.6 A brief statement of the firm's background, demonstrating longevity and financial Stability

6.3 Section 2: Project Services - In this section, which is intended to be the heart of the proposal, describe the respondent's expertise with the methods, QA/QC procedures, hardware and software necessary to perform the project services described in Part 7 of this RFP. Include information about the respondent's quality control program.

6.4 Section 3: Project Team - Start the section by introducing the designated project manager and the project team. The selection criteria in Part 4 require the proposed team to include an ASPRS Certified Photogrammetrist. Include a project team organization chart.

6.5 Section 4: Related Experience - For up to 3 relevant projects, include a one or two page project description that demonstrates similar capabilities in similar projects, for similar clients. Include the name of the client organization, the name of the person who can be contacted for reference, and the contact information for that person.

6.6 Section 5: Proposed Schedule - Include a brief schedule for the completion of the project services and the deliverables identified in Section 2 of your proposal. Include the proposed start and end dates. Describe your projected resource availability for the anticipated duration of the project.

6.7 Section 6: Fee - Complete the Fee Proposal Form from Attachment B.

6.8 Section 7: Sample Orthophoto - Provide a minimum of two different sample digital orthophotos on a CD. The samples shall meet the RFP criteria for the Counties and Urban Project Areas at the intended pixel resolutions. The samples must have been created by your company with the same type of camera system and processes you are proposing for this project. The digital orthophoto samples shall be in uncompressed, rectified GeoTIFF format. The samples shall be representative of the requirements for orthophotos as specified by the Counties in this project; however, the Counties' acceptance of the samples does not relieve the Contractor from meeting any part of this specification.

6.9 Section 8: Additional Information - At your discretion, include additional information such as an equipment list and other information that supports your proposal. However, choose the additional information carefully, because this section of the proposal shall not constitute the bulk of your submission.

7. Specifications

7.1 Existing Conditions-Each County will provide the following data and will be made available to the selected Contractor.

7.1.1 Ground Control – Each County and specified Urban areas have established horizontal and vertical ground control monuments available as GPS Survey Control Points.

7.1.2 Specified Urban Growth Area boundaries and City Limits

7.1.3 Project Area Boundaries including each County and the specified Urban.

7.1.4 Public Land Survey System (PLSS) – Will include Township, Range and Sections for each County; specified Urban areas may also include quarter section lines.

7.1.5 All files will be made available in Autodesk AutoCAD file or ESRI shapefile formats.

7.1.6 Any additional available GIS files that would assist this project and are not listed above. The successful Contractor, acting under the authority and approval of the

Counties, shall provide the following professional services for the 2012 Digital Orthophotography Project.

7.2 General Requirements

7.2.1 Datum, Projection and Accuracy

The final digital orthophotography will reference the Mississippi State Plane East Coordinate System, NAD83.

7.2.2 Aerial Acquisition

True color digital orthophotography will be developed for the area prescribed in attachment A at a scale of 1 inch = 200 foot with a 1 foot ground sample distance (GSD) or pixel resolution, and a scale of 1 inch = 100 foot with a 0.5 (1/2) foot GSD. Aerial acquisition will occur during periods when the deciduous foliage is dormant and the prevailing sun angle exceeds 30 degrees. Final orthophoto products will contain less than 5% cloud cover or cloud shadows. Imagery will be acquired using a high resolution digital camera. Data for the camera will be provided in the proposal as well as sample photography. Imagery will be collected in conjunction with airborne GPS and IMU data. Appropriate photo-identifiable ground control will be acquired to support the aerotriangulation and orthorectification processes. Data should be collected in ground ortho rendition where lateral displacement is not removed from the imagery. Imagery will be collected in natural color for true color rendition.

7.2.3 Analytical Aerotriangulation

Airborne GPS, IMU data and GPS ground control will be converted to a rigid network through a bundle aerotriangulation adjustment. The final adjustment must include all data sorties in a single block. As a demonstration of accuracy the completed adjustment, a report detailing the results of the triangulation adjustments will be prepared and submitted for review and approval prior to initiation of the digital orthophoto rectification

7.2.4 Re-flights - The Contractor at no additional fee shall correct aerial imagery that does not meet defined project specifications. All re-flights shall be centered on the plotted flight lines and shall be taken with the same camera system.

7.2.5 Crab - Crab shall not exceed five-degrees between any two consecutive flights, nor more than three degrees on any one flight line. At the earliest opportunity, new imagery shall be acquired to replace rejected photographs or flight lines.

7.2.6 Forward and Side Overlap - Forward lap shall average 60 percent and side lap shall average 30 percent, +5 percent. Any adjacent flights with side lap of less than 30 percent or more than 35 percent will be rejected, and the affected flights shall be re-flown at the earliest opportunity.

7.2.7 Description of Methodology - Proposals shall include description of the production process, quality assurance and the quality control measures to be included.

7.2.8 Description of Methodology - Proposals shall include a description of the production process and the quality control measures to be included.

7.2.9 Quality Control - Throughout triangulation, numerous checks shall be made to detect data and field control errors.

7.3 Photogrammetric Compilation

7.3.1 Digital Terrain Model (DTM) – DTM's established during February 2007 Statewide Aerial project will be used unless otherwise negotiated between vendor and county representatives

7.3.2 Digital Orthophotography-The vendor shall describe the production methods, quality assurance and quality control processes that shall be used to meet the following specifications:

7.3.2.1 One set of digital color balanced orthophotography with a 6-inch pixel resolution or better for Hancock, Harrison and Jackson Counties and 12-inch pixel resolution or better for specified Pearl River, Stone, and George Counties. All project areas shall include 4-color band (red, green, blue and NIR) imagery.

7.3.2.2 Tile format shall follow the identified PLSS feature specific to each project area.

7.3.2.3 Visible seams or sutures within a tile or between tiles, which exhibit a noticeable "edge" or "displacement" effect, will be grounds for rejection of that tile.

7.3.2.4 The tile naming convention shall be named based off the PLSS of Township, Range, Section or 1/4 Township for each County and Township, Range, Section, Quarter Section for specified Urban areas.

7.4 Metadata-The Contractor shall provide metadata compiled to the current standard endorsed by the Federal Geographic Data Committee (FGDC) for each of the data deliverables. Currently, this is the Content Standard for Digital Geospatial Metadata Version 2 (FGDCSTD-001-1998).

7.5 Summary of Deliverables-The Contractor shall be responsible for producing and delivering the following (digital project documents may be in either Microsoft Word or Adobe PDF format):

7.5.1 Project Documents:

7.5.1.1 Project Plan – one hard copy and one digital copy

7.5.1.2 Flight Map/Control Diagram – one hard copy and one digital copy

7.5.1.3 Ground Control Report - one hard copy and one digital copy

7.5.1.4 Aerial Photography Report – one hard copy and one digital copy

7.5.1.5 Aerial Triangulation Report – one hard copy and one digital copy

7.5.1.6 Project documents may be delivered on DVD media that can be read on a DVD+ROM drive or CD.

7.6 Project Data:

7.6.1 Digital orthophoto tiles with 6-inch and 12-inch pixel resolution delivered in uncompressed, rectified GeoTIFF format and, at a minimum, compressed tiles in JPG2000 and MrSID formats (subject to change according to current technology).

7.6.2 DEM including enhancements for each County and specified Urban area.

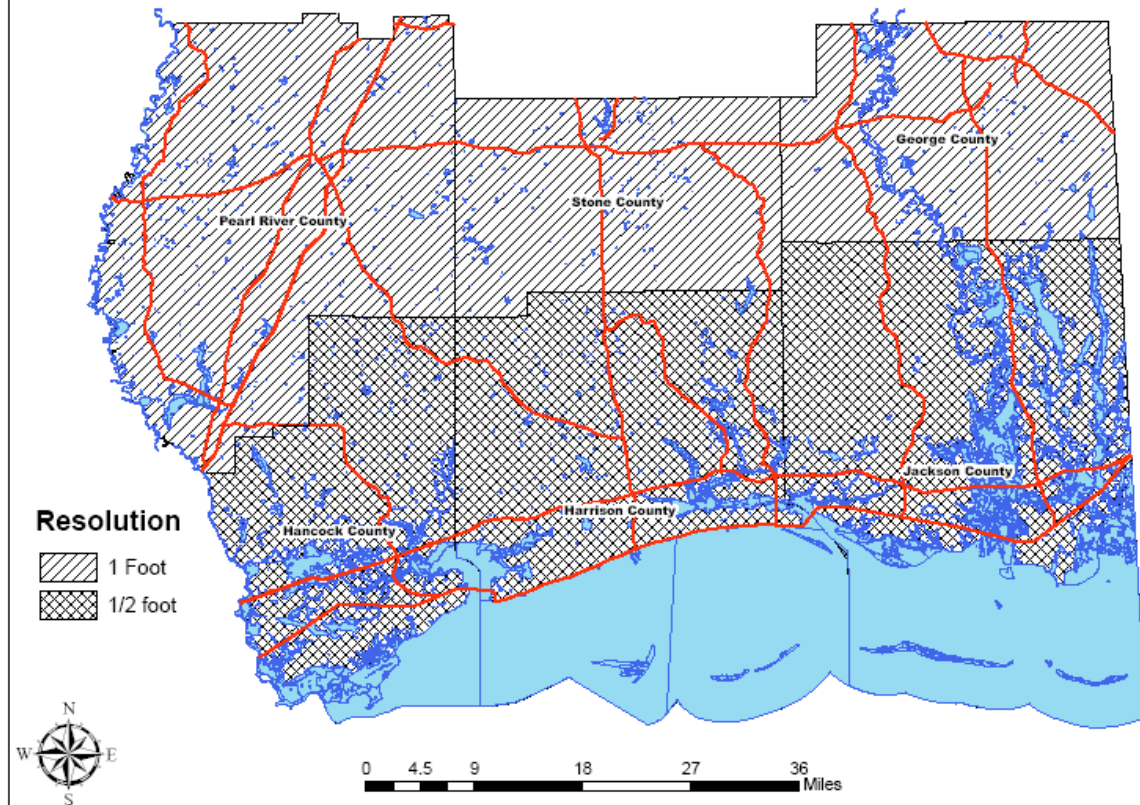
7.6.3 An ESRI shapefile containing all seamlines used for the orthophoto tiles.

7.6.4 Final digital data (orthophotography and DEM Enhancements) shall be delivered on a USB 2 external hard drive. Digital orthophotography produced for this project shall be consistent across entire Counties or specified Urban project areas and meet or exceed the General requirements identified in the Specifications. Work outputs and products, including raw and processed data are the property of the individual Counties and their funding partners that comprise the SMAPI and may not be conveyed other than mandated under Statute to any entity without prior approval of the County Boards of Supervisors.

7.7 Period of Performance

Acquisition of data will be completed in such a manner as to start producing ortho-rectified products by late March 2012. This deadline is established in order to meet the needs of Hancock County specifically. Harrison and Jackson County will need their products soon following. All counties shall have product no later than June 2012.

Exhibit 1



Attachment A

Attachment B: Fee Proposal Forms

Project: South Mississippi Aerial Photography

Company:_____

Items	Cost Per Sq Mile	Total
Hancock County		
Harrison County		
Jackson County		
Pearl River County		
Stone County		
George County		

Attachment C: Contract Grading Sheet

The following Chart will be used as the final score sheet for judging proposals. There may be additional concerns added based on County or funding partner request. Areas will be graded on a scale of 1-5, 1-does not meet standard 5-meets or exceeds standard.

ITEM	SCORE
4.1 Compliance with RFP Instructions	
4.2 Technical Expertise	
4.3 Digital Camera System	
4.4 Technical Approach	
4.5 Quality Control	
4.6 Professional Registration	
4.7 Business Registration	
4.8 Firm Background	
4.9 Staff Qualifications	
4.10 Similar Project Experience	
4.11 Schedule and Availability	
4.12 Sample Digital Orthophoto	
4.13 Other Services	
4.14 Fee	
Ability to meet Funding Partner Needs	